

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for manufacturing a bonded wafer, comprising:

ion-implanting a light element into a wafer for active layer at a predetermined depth via an insulating film that has been formed thereon to form an ion-implanted area in said active layer wafer;

subsequently bonding said active layer wafer with a supporting wafer having an insulating film formed thereon together as their insulating films facing to each other to produce the bonded wafer; and

heat treating said bonded wafer to form bubbles of said light element in said ion-implanted area and thereby induce a cleavage and separation of a part of said bonded wafer defined in said ion-implanted side for forming an active layer wherein

a thickness of said insulating film of said active layer wafer, t_{dox}, satisfies the following formula:

$$t_{dox} < (1/9) \times t_{soi},$$

where t_{soi} = thickness of said active layer.

2. (Cancelled)

3. (Currently amended) A method for manufacturing a bonded wafer in accordance with claim 1, in which

said active layer wafer and said supporting wafer are subjected to a plasma treatment, respectively, before said bonding step of said active layer wafer with said supporting wafer.

4. (Previously presented) A method for manufacturing a bonded wafer in accordance with claim 3, in which said plasma treatment is carried out in an atmosphere of oxygen gas or nitrogen gas by holding said wafers at a temperature of 400 °C or lower for ten seconds or longer.

5. (Cancelled)

6. (Cancelled)

7. (New) A method for manufacturing a bonded wafer in accordance with claim 1, in which the thickness of said insulating film of said active layer is between 0.05 µm and 1.0µm.

8. (New) A method for manufacturing a bonded wafer in accordance with claim 3, in which the thickness of said insulating film of said active layer is between 0.05 µm and 1.0 µm.